AMENDMENT TO THE CLAIMS

Please amend claims as follows:

1. (Currently Amended) An isolated neural stem cell (NSC), which is isolated by a method, comprising:

selecting said NSC based on said NSC exhibiting a CXC chemokine receptor 4 (CXCR4), demonstrating an affinity for the chemokine stromal-cell derived factor-1 (SDF-1), exhibiting markers characteristic of a precursor for astrocytic differentiated neural stem cells, said markers comprising A2B5 astrocytic precursor marker, not expressing excitatory amino acid transporter 1 (EAAT1), and not expressing excitatory amino acid transporter 2 (EAAT2), and

wherein said isolated NSC comprises a heterologous gene.

Claim 2-3 (Canceled).

4. (Withdrawn-Previously Presented) The isolated stem cell of claim ~~2~~1, wherein said isolated stem cell further exhibits a glial fibrillary acidic protein (GFAP) astrocytic precursor marker.

Claim 5 (Canceled).

6. (Currently Amended) The isolated stem cell of claim ~~5~~ 1, wherein said heterologous gene encodes a polypeptide of therapeutic use in the treatment of a disease condition.

7. (Original) The isolated stem cell of claim 6, wherein said polypeptide is cytotoxic.

8. (Original) The isolated stem cell of claim 6, wherein said polypeptide is involved in an immune response.

9. (Original) The isolated stem cell of claim 8, wherein said polypeptide is IL-12.

10. (Withdrawn) The isolated stem cell of claim 8, wherein said polypeptide is IL-4.

11. (Withdrawn) The isolated stem cell of claim 8, wherein said polypeptide is tumor necrosis factor-related apoptosis-inducing ligand (TRAIL).

Claim 12 (Canceled).

13. (Withdrawn-Currently Amended) A method for assessing tumor tropic potential of a neural stem cell comprising a heterologous gene, comprising:

providing ~~a~~ said neural stem cell (NSC);

determining an expression level of CXC chemokine receptor 4 (CXCR4) by said NSC, an affinity by said NSC for the chemokine stromal-cell derived factor-1 (SDF-1), an expression level of markers characteristic of a precursor for astrocytic differentiated neural stem cells, said markers comprising A2B5 astrocytic precursor marker, an expression level of excitatory amino acid transporter 1 (EAAT1), and an expression level of excitatory amino acid transporter 2 (EAAT2); and

assessing tumor tropic potential of said NSC based upon said expression level of CXCR4, said affinity for the chemokine SDF-1, said expression level of markers characteristic of a precursor for astrocytic differentiated neural stem cells, said markers comprising A2B5 astrocytic precursor marker, said expression level of EAAT1, and said expression level of EAAT2,

wherein an expression of CXCR4, an affinity for the chemokine SDF-1, an expression of markers characteristic of a precursor for astrocytic differentiated neural stem cells, said markers comprising A2B5 astrocytic precursor marker, a lack of expression of EAAT1, and a lack of expression of EAAT2 indicate said NSC having tumor tropic potential.

Claims 14-15 (Canceled).

16. (Withdrawn) The method of claim 13, wherein said stem cell further exhibits a glial fibrillary acidic protein (GFAP) astrocytic precursor marker.

Claim 17 (Canceled).

18. (Withdrawn-Currently Amended) A method for treating a disease condition in a mammal, comprising:

providing a neural stem cell (NSC) that exhibits a CXC chemokine receptor 4 (CXCR4), that demonstrates an affinity for the chemokine stromal-cell derived factor-1 (SDF-1), that exhibits markers characteristic of a precursor for astrocytic differentiated neural stem cells, said markers comprising A2B5 astrocytic precursor marker, that does not express excitatory amino acid transporter 1 (EAAT1), and that does not express excitatory amino acid transporter 2 (EAAT2), wherein said NSC comprises a heterologous gene; and

administering said NSC to said mammal in an amount sufficient to treat said disease condition.

Claims 19-21 (Canceled).

22. (Withdrawn) The method of claim 18, wherein said stem cell further exhibits a glial fibrillary acidic protein (GFAP) astrocytic precursor marker.

Claim 23 (Canceled).

24. (Withdrawn-Currently Amended) The method of claim ~~23~~ 18, wherein said heterologous gene encodes a polypeptide of therapeutic use in the treatment of said disease condition.

25. (Withdrawn) The method of claim 24, wherein said polypeptide is cytotoxic.

26. (Withdrawn) The method of claim 24, wherein said polypeptide is involved in an immune response.

27. (Withdrawn) The method of claim 26, wherein said polypeptide is IL-12.

28. (Withdrawn) The method of claim 26, wherein said polypeptide is IL-4.

29. (Withdrawn) The method of claim 26, wherein said polypeptide is tumor necrosis factor related apoptosis-inducing ligand (TRAIL).

30. (Withdrawn) The method of claim 18, wherein the disease condition is selected from the group consisting of breast cancer, colon cancer, lung cancer, prostate cancer, hepatocellular cancer, gastric cancer, pancreatic cancer, cervical cancer, ovarian cancer, liver cancer, bladder cancer, cancer of the urinary tract, thyroid cancer, renal cancer, carcinoma, melanoma, head and neck cancer, astrocytomas, ependymal tumors, glioblastoma multiforme, and primitive neuroectodermal tumors.

31. (Withdrawn) The method of claim 18, wherein administering said stem cells further comprises administering said stem cells in a composition further comprising an additional component selected from the group consisting of a vehicle, an additive, a pharmaceutical adjunct, a therapeutic compound, a carrier, agents useful in the treatment of disease conditions, and combinations thereof.

32. (Withdrawn) The method of claim 18, further comprising administering a volume of the chemokine SDF-1 to said mammal.

Claim 33 (Canceled).

34. (Currently Amended) A kit comprising:

a volume of isolated neural stem cells (NSCs) that exhibits a CXC chemokine receptor 4 (CXCR4), demonstrates an affinity for the chemokine stromal-cell derived factor-1 (SDF-1), exhibits markers characteristic of a precursor for astrocytic differentiated neural stem cells, said markers comprising A2B5 astrocytic precursor

marker, does not express excitatory amino acid transporter 1 (EAAT1), and does not express excitatory amino acid transporter 2 (EAAT2), wherein said NSC comprises a heterologous gene; and

instructions for the use of said volume of NSCs in the treatment of a disease condition in a mammal.

35. (Previously Presented) The kit of claim 34, wherein said volume of stem cells is included in a composition that further comprises an additional component selected from the group consisting of a vehicle, an additive, a pharmaceutical adjunct, a therapeutic compound, a carrier, agents useful in the treatment of disease conditions, and combinations thereof.

36. (Original) The kit of claim 34, wherein the disease condition is selected from the group consisting of breast cancer, colon cancer, lung cancer, prostate cancer, hepatocellular cancer, gastric cancer, pancreatic cancer, cervical cancer, ovarian cancer, liver cancer, bladder cancer, cancer of the urinary tract, thyroid cancer, renal cancer, carcinoma, melanoma, head and neck cancer, astrocytomas, ependymal tumors, glioblastoma multiforme, and primitive neuroectodermal tumors.

Claim 37 (Canceled).

38. (Original) The kit of claim 34, further comprising a volume of the chemokine SDF-1, and instructions for the use of said volume of the chemokine SDF-1 in the treatment of the disease condition.

Claims 39-43 (Canceled).